Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	§	
	§	
Implementing Kari's Law and Section 506 of RAY BAUM'S Act	§	PS Docket No. 18-261
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	§	
Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems	§	PS Docket No. 17-239
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INITIAL COMMENTS OF THE TEXAS 9-1-1 ENTITIES

The Texas 9-1-1 Alliance,[1] the Texas Commission on State Emergency Communications,[2] and the Municipal Emergency Communication Districts Association[3] (collectively, the "Texas 9-1-1 Entities") respectfully submit the following initial comments regarding the Federal Communications Commission (the "Commission") Notice of Proposed Rulemaking ("NPRM") in the above-referenced proceedings. The NPRM seeks to: (1) adopt direct dial access and notification rules for multi-line telephone systems ("MLTS") under Kari's Law; (2) conclude a proceeding as required by Section 506 of RAY BAUM'S Act ("RAY BAUM'S Act") to consider adopting rules ensuring that a dispatchable location is conveyed with a 9-1-1 call regardless of the technological platform used; and (3) consolidate existing 9-1-1 rules into a single rule part.[4]

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[1] The Texas 9-1-1 Alliance is an interlocal cooperation entity composed of 26 Texas emergency communication districts with E9-1-1 service and related public safety responsibility for more than 63% of the population of Texas. These emergency communication districts were created pursuant to Texas Health and Safety Code Chapter 772 and are defined under Texas Health and Safety Code Section 771.001(3)(B).

[2] The Texas Commission on State Emergency Communications ("CSEC") is a state agency created pursuant to Texas Health and Safety Code Chapter 771, and by statute is the state's authority on emergency communications. CSEC's membership includes representatives of the Texas 9-1-1 Entities and the general public, and CSEC directly oversees and administers the Texas state 9-1-1 program under which 9-1-1 service is provided in 206 of Texas' 254 counties, covering approximately two-thirds of the state's geography and one–fourth of the state's population.

[3] The Municipal Emergency Communication Districts Association ("MECDA") is an association of 26 municipal emergency communication districts, as defined under Texas Health and Safety Code Section 771.001(3)(A), that are located primarily in the Dallas-Fort Worth area.

[4] *See, In the Matter of Implementing Kari's Law and Section 506 of RAY BAUM'S Act and Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, PS Docket Nos. 18-261 and 17-239, Notice of

I. The Commission should adopt the proposed rules, including consolidating the Commission's existing 9-1-1 rules, with modifications.

The Commission should adopt the proposed rules, which are critically needed to ensure nationwide access to 9-1-1 service regardless of the technological platform used. The proposed dispatchable location rules should be modified to: (1) better enable 9-1-1 stakeholders to know and plan for minimum 9-1-1 caller location information expectations; (2) increase clarity and effectiveness; (3) recognize context distinctions; (4) allow continued future technological innovations; and (5) limit the use of registered location or third-party call centers. The necessity and appropriateness of these modifications is explained herein, with the proposed modifications included as Appendix A.

A. As a general matter, for 9-1-1 call delivery and routing, neither dispatchable location nor x, y coordinates (and z-axis, as applicable) should be needlessly different based solely on technological platform.

In considering a requirement to provide dispatchable location with every 9-1-1 call regardless of the technological platform, the NPRM discusses the issue in the context of MLTS, fixed telephony, mobile carriers, interconnected VoIP providers, Telecommunications Relay Services, and other 9-1-1 capable services.[5] The Commission also specifically asks about potential alternatives to dispatchable location, including provision of x, y and z coordinates.[6] Putting aside

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Proposed Rulemaking ("NPRM") (rel. Sept. 26, 2018) (a*vailable at* https://docs.fcc.gov/public/attachments/FCC-18-132A1.pdf).

[5] NPRM at ¶¶ 51-88.

[6] NPRM at ¶ 68:

> Although RAY BAUM'S Act directs the Commission to consider rules to ensure that dispatchable location is conveyed with 911 calls, there may be instances where location information that does not meet the definition of dispatchable location could still be useful to PSAPs and first responders, either as supplemental information to validate the dispatchable location or as an alternative in instances where dispatchable location information is not available. We therefore believe that our rules and policies should not preclude -- and in fact should allow and encourage -- potential alternatives to dispatchable location. We seek comment on this view. ... If we adopt dispatchable location requirements, should we allow provision of x/y/z coordinates or other approaches to conveying location information to be alternatives to dispatchable location?

See also, NPRM at ¶ 78:

the different contexts of Telecommunications Relay Services and MLTS (which is discussed later herein), as legacy TDM landline continues to transition to IP as the the dominant market solution, 9-1-1 calls are becoming increasingly less distinguishable based solely on technological platform.[7] Today, it is much more difficult to distinguish whether a 9-1-1 caller seeking emergency assistance is using a phone system wired within his or her home connected to a fixed (cable), nomadic, or wireless modem; using a fixed wireless 5G Home connection[8] or another wireless home phone device that may (or may not) operate differently from a 9-1-1 caller location perspective;[9] using a

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> Are there alternatives to dispatchable location that interconnected VoIP providers could use to provide location information, e.g., coordinate-based information? We seek comment on whether these, or other approaches, would provide the greatest likelihood of conveying an accurate location to the PSAP while minimizing the burdens on the interconnected VoIP service provider and the end user.

[7] *Cf.*, Verizon Initial Comments in GN Docket 13-5 (filed Nov. 28, 2018 (*available at* https://ecfsapi.fcc.gov/file/11283068911665/2018%2011%2028%20Verizon%20Interoperability%20Comments%20(13-5).pdf):

> There is no need for special criteria for discontinuing legacy voice services because customers are already rapidly abandoning legacy landline service in favor of VoIP and wireless alternatives. In the three years from June 2014 to June 2017, the number of interconnected VoIP subscriptions in the United States increased from 51 million to 64.5 million, and the number is likely even higher today. And as of December 2016, more than 92 percent of Americans had access to 25/3 Mbps fixed broadband, over which they easily can receive VoIP or over-the-top service from multiple providers. Further, as of December 2017, 53.9 percent of American households had eliminated landline service entirely in favor of wireless-only voice service. And among the minority of households that had not yet cut the cord despite having wireless phones, 40.9 percent received nearly all or all of their calls on their wireless phones. All told, about 69 percent of American households are wireless-only or wireless-mostly. Among households living in poverty, the abandonment of wireline offerings is even greater: 68.1 percent live in households with only wireless telephones, as do 58.1 percent of those living near poverty. And, according to Form 477 data, "approximately 93 percent of the population is covered by at least four [mobile wireless] service providers," and 100 percent of the population is covered by at least one provider. [Footnotes in original omitted].

[8] *Cf., Verizon gives some hints about how 5G Home is selling and performing* ("Verizon's 5G Home offering, currently available in parts of four cities, blasts internet services in its 28 GHz spectrum to stationary receivers in nearby homes and offices. Verizon is positioning the offering as an alternative to wired internet services from the likes of Charter and Comcast.") (*available at* https://www.fiercewireless.com/5g/verizon-gives-some-hints-about-how-5g-home-selling-and-performing).

[9] *Cf.*, AT&T Wireless Home Services, *Affordable home phone service and ultrafast internet access* (available at https://www.att.com/shop/wireless/devices/wireless-home-services.html#legal). *See also, AT&T Wireless Internet* ("Bring the high-speed of AT&T 4G LTE into your home to wirelessly connect tablets, phones, and computers with AT&T Wireless Internet. This easy-to-use device also lets you use your current home phone and number for unlimited nationwide calling.") (*available at* https://www.att.com/cellphones/att/att-wireless-internet.html#sku=sku8550279).

mobile smartphone or a wi-fi smartphone connected via CMRS or Wi-Fi Calling;[10] or using a tablet or watch[11] with or without CMRS services.[12]

Kari's Law on direct access to 9-1-1 service and the utterly tragic circumstances behind its ultimate enactment demonstrate that it is simply unreasonable to expect 9-1-1 callers to know or remember when they are required to do something differently during a 9-1-1 call based on their particular device or location. Unless there is a specific legitimate technological reason to support a difference,[13] the standards for 9-1-1 call delivery and routing should be the same without regard to technological platform. These proceedings are the appropriate time for the Commission as a general matter to set minimum 9-1-1 caller location expectations that are not needlessly different based on technological platform.

B. As a general matter, regardless of technological platform, dispatchable location should be validated and, to the extent possible, corroborated against other location information prior to delivery of dispatchable location information to the PSAP.

The proposed rule definition of "dispatchable location" is taken directly from the RAY BAUM'S Act but the proposed language does not include the additional sentence in the

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[10] *Cf.*, VOWIFI 911 AND APPLICATION OF PROXIMITY CHECK ("Proximity check" is a process that compares device X/Y with a pre-provisioned subscriber address, applying geospatial logic to derive the most appropriate routing to a PSAP and to deliver the most appropriate location data to that PSAP. It brings a higher level of accuracy to both call routing and location data-delivery for WiFi 911 calling.") (*available at* https://www.west.com/blog/safety-services/wireless/vowifi-911-proximity-check/).

[11] *How Different Apple Watches Call Emergency Services* ("If you have a newer Apple Watch Series 3 (GPS + Cellular) model, you don't need to have your iPhone nearby to make an emergency call.") (*available at* https://ios.gadgethacks.com/how-to/call-911-from-your-apple-watch-case-emergency-0185254/).

[12] *Cf., Emergency 911 calls operate differently if a connected device is Wi-Fi Calling-enabled, you are outside of cellular coverage and only Wi-Fi is available.* If you plan to have only your connected device (such as a NumberShare-enabled watch) without taking your paired host phone along, you should update your 911 US address on your paired phone based on where you will be located. This is the location that will be given to emergency services when you call 911 from the connected device (e.g., your watch). You can go to your phone's Settings and change your 911 address at any time (*available at* https://www.verizonwireless.com/support/numbershare-faqs/).

[13] In the NPRM at ¶¶ 74-75, the Commission discusses fixed VoIP and nomadic VoIP separately, and tentatively concludes that "we believe it is feasible for 911 calls that originate from interconnected VoIP services to convey dispatchable location to the PSAP... ." If the Commission is not going to transition to rules that generally apply regardless of technological platform, then the Commission at minimum should treat fixed VoIP comparable to fixed wireless and other fixed telephony and require dispatchable location from fixed VoIP (even if the Commission does not require dispatchable location from nomadic VoIP).

Commission's wireless 9-1-1 rules[14] requiring the location to be validated and, to the extent possible, corroborated. The additional language would appropriately require that the location be "validated and, to the extent possible, corroborated against other location information prior to delivery of dispatchable location . . . to the PSAP." While consistency alone warrants that the definition of "dispatchable location" be the same across the Commission's 9-1-1 rules regardless of technological platform (*e.g.*, CMRS, fixed telephone/legacy landline, MLTS), this is particularly important as technological platforms morph and evolve (e.g., fixed wireless, mobile VoIP, Wi-Fi calling) and no longer fit neatly into traditionally defined and differentiated categories. Validation and corroboration are particularly necessary in an IP environment. It must become the rarest of circumstances where a 9-1-1 call that should have been routed to a PSAP in Minnesota is instead routed to a PSAP in Texas.[15] This should especially be the case when a 9-1-1 caller is using a location-aware smartphone using Wi-Fi Calling.[16]

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[14] *Cf.*, current 47 C.F.R. § 20.18(i)(1)(i); proposed 47 C.F.R. § 9.10(i)(1)(i).

[15] *Cf.*, early filed Nov. 5, 2018 initial comments of the Metropolitan Emergency Services Board ("MESB") in these proceedings at p. 5:

> End users are not always educated as to how changes they initiate affect 9-1-1 access. For example, recently a 9-1-1 call from a local Minnesota fast-food chain restaurant routed to Travis County Sheriff's Office in Austin, Texas. The Texas PSAP had to ascertain the caller's location and determine to what Minnesota PSAP to transfer the call. This wasted precious time compared to accurate initial routing of the 9-1-1 call. When the local Minnesota PSAP followed up with the restaurant, the manager reported that he had recently made some changes to the alarm and Internet service and was unsure if they had a VoIP phone system or not. Later it was determined that the restaurant had service from a nationwide enterprise VoIP MLTS system.

(*available at* https://ecfsapi.fcc.gov/file/1105301066483/MESB%20Comments%20re%20PS%20Docket%2018-261%2011.5.18.pdf).

[16] *Cf.*, *id.*, at p. 6:

> For example, a 9-1-1 call was received by the Minneapolis PSAP with an ALI record indicating a single-family residence in the southern part of the city. However, the telecommunicator determined during the call that the caller was not at that residence and indeed had not lived there for several months. The caller was calling from a state park approximately 30 miles from Minneapolis and had connected to their wireless carrier using a Wi-Fi calling feature which connected over the Internet and not via with wireless carrier's cellular towers.

(*available at* https://ecfsapi.fcc.gov/file/1105301066483/MESB%20Comments%20re%20PS%20Docket%2018-261%2011.5.18.pdf).

C. Comments on specific MLTS context rule provisions on direct dial acess and notification, and defining "calling party" and "necessary to adequately identify the location of the calling party" for MLTS dispatchable location.

With regard to Kari's Law direct dial access and notification, the Commission proposed rules should generally be adopted as written. However, based on questions that we continue to receive regarding the state law version of Kari's Law in Texas, if it is the Commission's intent to preclude MLTS from being configured to not allow outbound calls (including calls to 9-1-1) as opposed to requiring MLTS that allow outbound dialing to have direct access to 9-1-1, then the FCC may want to clarify that concept.[17]

Because the federal version of Kari's Law does not apply to MLTS manufactured, imported, offered for first sale or lease, first sold or leased, or installed on or before February 16, 2020, in the NPRM the Commission seeks information on (1) whether legacy systems are able to comply with direct dial access;[18] and (2) whether transitional rules should be adopted for legacy systems that do not provide direct dial access, including instructural stickers as provided for under Texas statute and rules.[19] In response to the question regarding the status of the ability of legacy MLTS to provide direct dial acess, the number of waivers requested in Texas is summarized at a high-level and publicly available, and shows that the number of waivers requested in the second

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[17] Following passage of Kari's Law in Texas, the Texas 9-1-1 Entities received questions from business owners and their attorneys/representatives about the application of the law to an MLTS that is configured to limit the calling scope of outbound calling. Such questions generally, if not exclusively, are with respect to MLTS installed in call centers. In its rule implementing Kari's Law, CSEC clarified that the law applied to a telephone system "that provides outbound dialing capacity." *See,* 1 Tex. Admin. Code § 251.16(a) and (c).

[18] NPRM at ¶ 40:

> Accordingly, MLTS manufactured, imported, offered for first sale or lease, first sold or leased, or installed on or before that date are grandfathered from compliance with the statute. To what extent is direct dialing of 911 already available and in use in MLTS? To the extent that MLTS in use do not support direct dialing, what options are currently available to installers, managers, and operators that may be planning to upgrade or replace their systems?

[19] NPRM at ¶ 41:

> We also seek comment on whether we should adopt transitional rules to inform consumers of the 911 capabilities of grandfathered MLTS. For example, the state version of Kari's Law enacted in Texas requires enterprises to place a sticker adjacent to or on non-compliant MLTS devices that provides instruction in English and Spanish on how to call 911. [Footnote in original citing Texas statute and rule omitted].

and third years were less than in each prior year.[20] But it appears there may indeed be some older and smaller telephone systems that could remain operational as long as TDM networks are still available. Regarding the question about transitional rules, if the Commission does adopt an instructional sticker requirement, efforts should be made to harmonize the rules so as to not alter state law or otherwise require two stickers in instances where a sticker may used under state law when there is no direct access from a legacy MLTS.[21]

With regard to the Commission's proposed rule revisions on dispatchable location, as noted previously, it is critical to add the additional validation and corroboration language comparable to the Commission's wireless rule to the definition of dispatchable location. There are two additional appropriate clarifications in the context of MLTS and dispatchable location. First, in the context of MLTS, the Commission should adopt a definition of "calling party" to specifically indicate that it is the *actual person* who is making the 9-1-1 emergency call, not the MLTS (i.e., the location of a centralized MLTS is provided). Second, while it may be reasonable in the context of communications service providers to leave the meaning of the phrase "or similar information necessary to adequately identify the location of the calling party" to the specific service providers and individual circumstances, in the context of less sophisticated MLTS parties it is reasonable to provide some guidance that a MLTS meeting at least the capabilities of the NENA model legislation[22] is presumed to have satisfied the expectation of providing information "necessary to

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[20] *See*, Statistics and Data, Year 2015-2016, Year 2016-2017, and Year 2017-2018 (available at http://www.texas911.org/KarisLaw).

[21] NPRM at ¶ 41:

> With regard to implementation, Kari's Law expressly provides that Congress did not intend to "alter the authority of State commissions or other State or local agencies with jurisdiction over emergency communications, if the exercise of such authority is not inconsistent with this Act."

[22] *See*, NENA, MLTS Model Federal Legislation, Sections 5, 6 (2015), http://c.ymcdn.com/sites/www.nena.org/resource/collection/C3D071C2-FACD-41CB-A09C-354888272EF8/MLTS_2015.pdf. The model legislation proposes that MLTS provide adequate location determination capabilities by supporting the assignment of a unique Emergency Location Identification Number (ELIN) and Emergency Response Location (ERL) to each station equipped with dialing facilities. *See id.*, Section

adequately identify the location of the calling party." Doing so would not preclude exceeding the NENA model legislation in the context of MLTS, but it would provide an ascertainable "safe harbor" that those installing, managing, or operating MLTS would not be subsequently questioned or second guessed after the fact on the appropriate interpretation of what constitutes "similar information necessary to adequately identify the location of the calling party."

II. Conclusion

The Texas 9-1-1 Entities appreciate the opportunity to provide the foregoing initial comments on these matters, and respectfully request that the Commission take action in these proceedings in a manner consistent with these initial comments.

5(b). It then generally provides that MLTS managers can satisfy their location provisioning obligations as follows: (1) shared residential MLTS can provide a unique ELIN and ERL for each living unit and common area served and may meet the requirements for business MLTS with respect to stations in all other areas; (2) temporary residence MLTS may provide a unique ELIN and ERL for each temporary residential unit served and may meet the requirements for business MLTS with respect to stations in all other areas; and (3) business MLTS may provide at least one ERL for each floor of each property served and within each floor at least one additional ERL for each whole 7,000 square feet of workspace beyond the first, plus one additional ERL for any remaining workspace, if the MLTS is configured to also provide alternative notification. *See id.*, Section 6(b), (c).

Respectfully submitted,

Michael J. Tomsu
Vinson & Elkins L.L.P.
2801 Via Fortuna, Suite 100
Austin, Texas 78746
512-542-8527
512-236-3211 (fax)
mtomsu@velaw.com

On behalf of the Texas 9-1-1 Alliance

Patrick Tyler
General Counsel
333 Guadalupe Street, Suite 2-212
Austin, Texas 78701-3942
512-305-6915
512-305-6937 (fax)
Patrick.tyler@csec.texas.gov

On behalf of the Texas Commission on State Emergency Communications

Elizabeth Cole
President

On behalf of the Municipal Emergency Communication Districts Association

On the comments:
Richard A. Muscat
Bexar Metro 9-1-1 Network

December 10, 2018

Appendix A[23]

9.2 General minimum expectations for delivery of all 911 calls regardless of technological platform

In the absence of a Commission rule specific exception or waiver on or after February 16, 2020 the following are minimum expectations for delivery of all 911 calls placed on any network, service, system, or device within the jurisdiction of the Commission to regulate regardless of technological platform:

(1) As the primary caller location information, either (a) dispatchable location as defined in 9.3 shall be provided or (b) x, y coordinates (and z-axis, as applicable) meeting the minimum requirements applicable to a CMRS provider in 9.10 shall be provided. To the extent technically feasible dispatchable location is presumed to be the general approach used indoors, but this presumption does not restrict the use of x, y coordinates (and z-axis, as applicable) when such is believed to be the more accurate caller location information or when using dispatchable location is not possible.

(2) As a secondary caller location information fallback or where neither dispatchable location nor x, y coordinates (and z-axis, as applicable) are possible, use of registered location is permissible as long as a proximity check mechanism of the caller's registered location is used where technically feasible.

(3) Where use of dispatchable location, x, y coordinates (and z-axis, as applicable), and registered location are not possible or where there is no information available to route a 911 call because of system inability or failure, use of a third-party call center is permissible.

9.3 Definitions

Calling Party. The person making the 9-1-1 call. In the context of MLTS, the MLTS is not the calling party, but rather the person making the 9-1-1 call is the calling party.

Dispatchable location. A location delivered to the PSAP with a 911 call that consists of the street address of the calling party, plus additional information such as suite, apartment or similar information necessary to adequately identify the location of the calling party. The street address of the calling party must be validated and, to the extent possible, corroborated against other location information prior to delivery of dispatchable location information to the PSAP. In the context of MLTS meeting the expectations of NENA model legislation[24] is presumed to have satisfied the expectation of necessary to adequately identify the location of the calling party.

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[23] In this Appendix the suggested additional language that is different from NPRM is underlined.

[24] *See*, NENA, MLTS Model Federal Legislation, Sections 5, 6 (2015), http://c.ymcdn.com/sites/www.nena.org/resource/collection/C3D071C2-FACD-41CB-A09C-354888272EF8/MLTS_2015.pdf. The model legislation proposes that MLTS provide adequate location determination capabilities by supporting the assignment of a unique Emergency Location Identification Number (ELIN) and Emergency Response Location (ERL) to each station equipped with dialing facilities. *See id.*, Section 5(b). It then generally provides that MLTS managers can satisfy their location provisioning obligations as follows: (1) shared residential MLTS can provide a unique ELIN and ERL for each living unit and common area served and may meet the requirements for business MLTS with respect to stations in all other areas; (2) temporary residence MLTS may provide a unique ELIN and ERL for each temporary residential unit served and may meet the requirements for business MLTS with respect to stations in all other areas; and (3) business MLTS may provide at least one ERL for each floor of each property served and within each floor at least one additional ERL for each whole 7,000 square feet of workspace beyond the first, plus one additional ERL for any remaining workspace, if the MLTS is configured to also provide alternative notification. *See id.*, Section 6(b), (c).